

PATENT CLAIMS

1. A device (1) for determination of the angular  
5 position ( $\alpha$ ) of a rotating body (2) relative to a  
support (4), said device comprising a generator (6) of  
magnetic flux (32) connected to the rotating body and a  
magnetoresistive sensor (8) connected to the support  
(4), characterized in that the generator (6) of  
10 magnetic flux (32) takes the form of a ring or a  
portion of a ring and comprises alternating poles (10,  
12) making up a series of magnets generating magnetic  
fluxes (32) in substantially parallel directions (30).
- 15 2. The device as claimed in claim 1, characterized  
in that the magnetic flux generator (6) is cut from a  
strip (14) consisting of a series of lines (16) of a  
constant width (1) extending in the same direction (18)  
and constituting said poles.
- 20 3. The device as claimed in claim 2, characterized  
in that the width (1) of the lines is less than 5  
millimeters.
- 25 4. The device as claimed in any one of the  
preceding claims, characterized in that the magnetic  
flux generator (6) comprises at least 10 alternating  
poles (10, 12).
- 30 5. The device as claimed in any one of the  
preceding claims, characterized in that the magnetic  
flux generator (6) takes the form of a portion of a  
ring extending over at least 120 degrees.
- 35 6. The device as claimed in any one of the  
preceding claims, characterized in that the  
magnetoresistive sensor (8) comprises two  
magnetoresistive elements (20, 22) offset angularly by  
45° and a microcontroller (24) determining the angular

position of the rotating body (2) from the  
electrical signals (26, 28) transmitted by said  
magnetoresistive elements.